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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/715,380

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Jun-Ho Choi

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EXAMINER

TEKLE, DANIEL T

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/715,380

Applicant(s)

CHOI ET AL.

Examiner

Daniel Tekle

Art Unit

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6, 8, 9 and 11-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-9, 11-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claim 1-6, 8-9 and 11-25 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1-6, 8-9 and 11-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Hirayama et al. (U.S. 5,652,824).

Regarding Claim 1: Hirayama et al. discloses a method of processing audio streams of an optical disk driver that drives an optical disk where a video stream of a single channel and audio streams of a plurality of channels are recorded, the method comprising: checking whether one of a plurality of multi-language selection function keys is selected from a key input unit by a user (column 6 lines 39-43); displaying a language selection menu, including a plurality of language choices, when the multi-language selection function key is selected (column 8 lines 31-45 and column 8 lines 51-55); storing language codes corresponding to a plurality of languages selected from the language selection menu; enabling two or more audio decoders designated for decoding audio streams corresponding to the language codes (column 6 lines 45-48);

reading audio streams addressed to the language codes from a predetermined recording area of the optical disk and simultaneously outputting the read audio streams to their respective audio decoders and converting the output audio streams from digital to analog audio signals and simultaneously outputting the analog signals to the user via two or more independent audio channels (column 6 lines 45-48 and column 15-16, lines 66-12 respectively).

Regarding Claim 2: Hirayama et al. discloses a method of claim 1, wherein when it is determined in the checking that one of a plurality of multi-language selection function key is not selected, a default mode is entered, wherein in the default mode, a language previously designated by the user as a default is selected, an audio decoder corresponding to the default language is designated, and an audio stream corresponding to the default language is decoded using the designated audio decoder (column 9 lines 29-34).

Regarding Claim 3: Hirayama et al. discloses a method of claim 1, further comprising outputting the analog audio stream signals corresponding to the different languages to the two or more independent audio channels corresponding to each of the different languages (column 6 lines 45-48).

Regarding Claim 4: Hirayama et al. discloses an optical disk driver that reproduces data from an optical disk where a video stream of a single channel and audio streams of a plurality of channels are recorded, the optical disk driver comprising: an RF amplification unit which extracts a servo signal and modulated data from an electrical signal generated from a pickup unit (column 5 lines 20-39); a digital signal processing

unit which demodulates the modulated data extracted by the RF amplification unit and separates the demodulated data into audio streams of a plurality of channels and a video stream of a single channel (**column 5 lines 20-39**); one or more audio decoding units which separately decodes audio streams selected from among the audio streams of the plurality of channels provided by the digital signal processing unit (**column 5 lines 40-54**); and a system control unit which calls a language selection menu in response to a language selection key signal from a user, selects multiple language codes, designates audio decoding units corresponding to the selected language codes, reads audio streams corresponding to the selected language codes, and simultaneously outputs the read audio streams to the corresponding audio decoding units (**column 9 lines 5-27**); and a digital to analog converter to convert the decoded audio steams from digital to analog audio signals and simultaneously output the analog audio signal to the user via tow or more independent audio channels (**column 15-16, lines 66-12** respectively).

Regarding Claim 5: Hirayama et al. discloses an optical disk driver of claim 4 further comprising a key input unit, which applies a command for voice selection to the system control unit (**column 9 lines 5-27**).

Regarding Claim 6: Hirayama et al. discloses an optical disk driver of claim 4, further comprising: a memory storage that interfaces to the system control unit to store the menu of languages and the multiple selected language codes (**column 12 lines 9-26 and figure 9**).

Regarding Claim 8: Hirayama et al. discloses an optical disk driver of claim 4, further comprising: a display device responsive to the system control unit to display the language selection menu (**fig. 8a-8b**); and an input device wherein the user selects from the language selection menu and the system control unit designates the audio decoding units corresponding to the user selected languages (**fig. 8a-8b**).

Regarding Claim 9: Hirayama et al. discloses a system to reproduce signals from an optical disk comprising: a pickup unit to read optical signals from the optical disk (**column 5 lines 20-39**); a digital signal processor that separates the signals read from the optical disk into a video stream and a plurality of audio streams (**column 5 lines 40-54**); a signal decoder includes a plurality of audio signal decoders that simultaneously decodes separate audio streams and a video decoder that simultaneously decodes the video stream (**column 5 lines 40-54 and column 6 lines 45-48**); a controller that designates two or more of the audio streams to be decoded by the audio signal decoder in response to language selection key inputs from a user (**column 6 lines 45-48**); and a digital to analog converter to convert the decoded audio steams from digital to analog audio signals and simultaneously output the analog audio signal to the user via tow or more independent audio channels (**column 15-16, lines 66-12 respectively**).

Regarding Claim 11: Hirayama et al. discloses a system of claim 9, further comprising: an input device that sends a signal to the controller designating different selections in response to a user input (**column 5 lines 20-39**).

Regarding Claim 12: Hirayama et al. discloses a system of claim 11, further comprising: a display device to display different selection choices for the user to choose different selections using the input device **(figure 5)**.

Regarding Claim 13: Hirayama et al. discloses a system of claim 12, wherein the selection choices are different languages **(Figure 5)**.

Regarding Claim 14: Hirayama et al. discloses a system of claim 12, wherein the selection choices are different musical tracks **(Figure 5)**.

Regarding Claim 15: Hirayama et al. discloses a system of claim 12, wherein the selection choices are different sound effects and musical scores **(Figure 5)**.

Regarding Claim 16: Hirayama et al. discloses a system to simultaneously reproduce multiple audio signals read from a disk comprising: a display (column 6 line 56); a key input unit having a plurality of multi-language selection function keys (column 4 lines 35-45); a DVD driver checking whether one of the plurality of multi-language selection function keys is selected by a user and displaying a language selection menu including a plurality of language choices on the display when the multi-language selection function key is selected (column 9 lines 5-29); a digital signal processor that separates the multiple signals read from the disk into a plurality of audio streams **(column 5 lines 49-54)**; controller that designates a plurality of audio decoders to digitally decode separate audio streams from the disk (column 6 lines 45-48), the audio streams corresponding to a plurality of languages selected from the language selection menu by the user **(column 9 lines 11-14)**; and a digital to analog converter to convert the

digitally decoded audio streams to analog signals and output the analog signals simultaneously to separate audio channels (column 15-16, lines 66-12 respectively).

Regarding Claim 17: Hirayama et al. discloses a system of claim 16, wherein when the DVD driver determines that one of a plurality of multi-language selection function key is not selected, a default mode is entered, wherein in the default mode, a language designated as a default is selected, an audio decoder corresponding to the default language is designated, and an audio stream corresponding to the default language is decoded using the designated audio decoder (column 9 lines 29-34).

Regarding Claim 18: Hirayama et al. disclose a system of claim 17, wherein the digital signal processor separates a video stream from the multiple signals read from the disk (column 5 lines 40-59).

Regarding Claim 19: Hirayama et al. discloses a system of claim 18, further comprising a signal decoder a video decoder that simultaneously decodes the separate audio steam and the video stream from the disk and outputs a video signal (column 5 lines 40-59).

Regarding Claim 20: Hirayama et al. discloses a system of claim 16, wherein the plurality of multi-language function selection keys are provided at predetermined portion of a remote controller (column 13 lines 55-58).

Regarding Claim 21: Hirayama et al. discloses the system of claim 16, wherein the separate audio channels are a 2 channel stereo signal having a left audio channel and a right audio channel (column 16 lines 14-16).

Regarding Claim 22: Hirayama et al. discloses the system of claim 21, wherein a volume of an audio signal in the left audio channel and a volume of an audio signal in the right audio channel may each be adjusted independently (**column 15 lines 65-67 and column 16 lines 1-12**).

Regarding Claim 23-25: Claims 23-25 are rejected for the same subject matter as claims 20-22 respectively.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel Tekle whose telephone number is 571-270-1117. The examiner can normally be reached on 7:30am to 5:00pm M-R and 7:30-4:00 Every other F..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha D. Banks-Harold can be reached on 571-272-7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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